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FILE 'USPATFULL' ENTERED AT 15:56:49 ON 01 JUN 2009
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*** YOU HAVE NEW MAIL ***

=> s probe (4a) (EL or electrolumines?) (4a) (dye or label?)
L1          12 PROBE (4A) (EL OR ELECTROLUMINES?) (4A) (DYE OR LABEL?)

=> s l1 and detect?
L2           9 L1 AND DETECT?

=> s l2 amd azole
MISSING OPERATOR L2 AMD
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s l2 and (azole or imidazole)
L3           6 L2 AND (AZOLE OR IMIDAZOLE)

=> dup rem l3
PROCESSING COMPLETED FOR L3
L4            6 DUP REM L3 (0 DUPLICATES REMOVED)

=> d l4 bib abs 1-6

L4   ANSWER 1 OF 6  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2007:116984  CAPLUS
DN   146:180299
TI   Development of organic electroluminescence dye indicator for biomolecules
IN   Isobe, Shinichiro
PA   Japan
SO   PCT Int. Appl., 94pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2007013601        A1    20070201    WO 2006-JP315008       20060728
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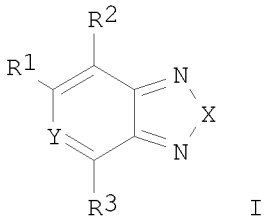
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP 1932888 A1 20080618 EP 2006-781918 20060728
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

IN 2008CN00461 A 20080919 IN 2008-CN461 20080128
KR 2008038183 A 20080502 KR 2008-704688 20080227
CN 101273096 A 20080924 CN 2006-80035218 20080324
PRAI JP 2005-219218 A 20050728
JP 2006-25658 A 20060202
WO 2006-JP315008 W 20060728
OS MARPAT 146:180299
GI



I

AB Azole electroluminescence dye indicators having spacer regions for nucleic acids and proteins have been developed. The EL dyes have general structures I (R1,R4 = H, halo, alkyl, alkenyl, alkoxy, OH, CN, sulfonyl, aromatic, heterocyclic; R2,R3 = R1, thiophene, furan, pyrrole, imidazole, oxazole, thiazole, pyrazoles, pyridines, sulfonyl aryl; X = N, S, O, Se, B with(out) substitution; Y = CR4, N, N+R'; R' = alkyl, alkyaryl; An- = Cl-, Br-, I-, CF3SO3-, BF4-, PF6-). The EL dyes addnl. comprise a spacer region -(CHR')p-X-(CHR'')q- (X = NHCOO, CONH, COO, SO2NH, NHC(:NH)NH, O, S, NR, CH:CH, C.tplbond.C, Ar, CO-Ar-NR; R = alkyl; R', R'' = H, alkyl with(out) aromatic rings and they can contain sulfonyl, OH, quaternary amines, CO2H; Ar = aryl; p, q = 0 .apprx. 20; p + q ≥ 1), amino acid, or peptides (such as peptides containing cysteic acid, 2-amino-3-sulfosulfanyl propanoic acid, 2-amino-3-sulfoxypropanic acid, tyrosine, threonine, 4-amino-2-hydroxybutanoic acid, homoserine or serine). The indicators have reactive moiety for labeling that consist of carboxylic acid, isocyanate, isothiocyanate, epoxy, alkyl halides, triazine, or carbodiimide. The indicators can be applied to various biomols. involved in specific binding process they include oligonucleotide probes, nucleotide amplification primers or terminators, PNA mol. beacons, proteins (antigens, haptens and antibodies), biotin or avidins, tag peptide, lectin, glycoproteins, hormones and receptors. The systems using electrophoresis are especially claimed as the method to detect the indicator-labeled biomols. Syntheses of some specific EL dyes and labeling of oligo DNA and proteins were demonstrated.
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 6 USPATFULL on STN
AN 2007:177073 USPATFULL
TI Method for detecting biomolecule, labeling dye used therefore, and labeling kit
IN Isobe, Shinichiro, Fukuoka, JAPAN
PI US 20070154890 A1 20070705
AI US 2004-584089 A1 20041222 (10)
WO 2004-JP19215 20041222
20060809 PCT 371 date
PRAI JP 2003-427268 20031224
DT Utility
FS APPLICATION
LREP WENDEROTH, LIND & PONACK, L.L.P., 2033 K STREET N. W., SUITE 800, WASHINGTON, DC, 20006-1021, US
CLMN Number of Claims: 29
ECL Exemplary Claim: 1-21
DRWN 8 Drawing Page(s)
LN.CNT 1198
AB The present invention provides a method for detecting a biomolecule. The method includes reacting a biomolecule sample with an organic EL-dye and measuring the fluorescence of the biomolecule sample labeled with the organic EL-dye. The method provides a highly sensitive method of detecting a biomolecule at lower cost.

L4 ANSWER 3 OF 6 WPIDS COPYRIGHT 2009 THOMSON REUTERS on STN
AN 2005-522257 [53] WPIDS
DNC C2005-158451 [53]
DNN N2005-426610 [53]
TI Detecting biomolecules e.g. nucleic acid and protein, involves reacting biomolecule sample and organic electroluminescent (EL) dye, and measuring fluorescence of biomolecule sample labeled with EL dye
DC B04; D16; S03
IN ISOBE S
PA (ISOB-I) ISOBE S; (MATA-I) MATAKA S; (TAKE-I) TAKENAKA S
CYC 106
PIA WO 2005062046 A1 20050707 (200553)* JA 67[13]
JP 2005208026 A 20050804 (200553) JA 28
US 20050181380 A1 20050818 (200555) EN
US 7015002 B2 20060321 (200621) EN
EP 1712911 A1 20061018 (200669) EN
JP 3881667 B2 20070214 (200714) JA 29
CN 1902490 A 20070124 (200740) ZH
US 20070154890 A1 20070705 (200746) EN
KR 2007003827 A 20070105 (200755) KO
IN 2006CN02338 P4 20070706 (200769) EN
JP 2005516510 X 20071213 (200801) JA 49
ADT WO 2005062046 A1 WO 2004-JP19215 20041222; JP 2005208026 A JP 2004-105187 20040331; JP 3881667 B2 JP 2004-105187 20040331; US 20050181380 A1 US 2004-822775 20040413; US 7015002 B2 US 2004-822775 20040413; CN 1902490 A CN 2004-80038772 20041222; EP 1712911 A1 EP 2004-807572 20041222; EP 1712911 A1 WO 2004-JP19215 20041222; US 20070154890 A1 WO 2004-JP19215 20041222; KR 2007003827 A WO 2004-JP19215 20041222; IN 2006CN02338 P4 WO 2004-JP19215 20041222; IN 2006CN02338 P4 IN 2006-CN2338 20060626; KR 2007003827 A KR 2006-714817 20060721; US 20070154890 A1 US 2006-584089 20060809; JP 2005516510 X WO 2004-JP19215 20041222; JP 2005516510 X JP 2005-516510 20041222
FDT JP 3881667 B2 Previous Publ JP 2005208026 A; EP 1712911 A1 Based on WO 2005062046 A; KR 2007003827 A Based on WO 2005062046 A;

JP 2005516510 X Based on WO 2005062046 A
PRAI JP 2003-427268 20031224
JP 2004-105187 20040331
AN 2005-522257 [53] WPIDS
AB WO 2005062046 A1 UPAB: 20051223
NOVELTY - Detecting (M1) a biomolecule, involves reacting the biomolecule sample and an organic electroluminescent (EL) dye, and measuring the fluorescence of the biomolecule sample labeled with the EL dye.

DETAILED DESCRIPTION - Detecting (M1) a biomolecule, involves:

(1) reacting the biomolecule sample and an organic electroluminescent (EL) dye, and measuring the fluorescence of the biomolecule sample labeled with the EL dye;

(2) labeling biomolecule sample with a signal coloration element having a five membered ring compound containing one or more types of heteroatom and selenium or boron atom, and measuring the fluorescence of the labeled biomolecule;

(3) reacting biomolecule sample and probe labeled with organic EL dye, and measuring fluorescence of the biomolecule sample; or

(4) separating the biomolecules contained in the biomolecules sample based on their size by electrophoresis, where the sample is labeled with an organic EL dye before or after the electrophoresis.

INDEPENDENT CLAIMS are also included for:

(1) signal coloration element for (M1), comprising an organic EL dye having a reactive group for binding a biomolecule;

(2) labeling kit for labeling biomolecules, comprising organic EL dye;

(3) a method (M2) for labeling tissue or cell sample comprising biomolecule with an organic EL dye; and

(4) dye for labeling tissue or cell sample, comprising an organic EL dye having a reactive group for binding a biomolecule in the tissue or cell.

USE - (M1) is useful for detecting biomolecules such as nucleic acid, protein, peptides and carbohydrates (claimed).

ADVANTAGE - (M1) enables detection of several biomolecules simultaneously with more sensitivity at lower cost. The organic EL dye is chemically stable for freeze-drying and can be stored for long term, and has high quantum yield in solid state and has high fluorescent intensity.

L4 ANSWER 4 OF 6 USPATFULL on STN
AN 2003:250999 USPATFULL
TI Quantitative determination of nucleic acid amplification products
IN Patel, Rajesh, Fremont, CA, UNITED STATES
Kurn, Nurith, Palo Alto, CA, UNITED STATES
PI US 20030175785 A1 20030918
AI US 2003-389665 A1 20030314 (10)
RLI Division of Ser. No. US 2002-43415, filed on 10 Jan 2002, GRANTED, Pat. No. US 6573054 Continuation of Ser. No. US 1998-25639, filed on 18 Feb 1998, GRANTED, Pat. No. US 6365346
DT Utility
FS APPLICATION
LREP Dade Behring Inc., Legal Dept. - Patents, 1717 Deerfield, Rd., #778, Deerfield, IL, 60015-0778
CLMN Number of Claims: 32
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 2667
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method for detecting the amount of a target polynucleotide in a sample. A combination is provided in a medium. The combination comprises (i) a sample suspected of containing the target polynucleotide, the target polynucleotide being in single stranded form, (ii) a reference polynucleotide comprising a sequence that is common with a sequence of the target polynucleotide, and (iii) a predetermined amount of an oligonucleotide probe that has a sequence that hybridizes with the sequence that is common. The combination is subjected to conditions for amplifying the target polynucleotide and the reference polynucleotide. The conditions permit formation of substantially non-dissociative complexes of the target polynucleotide and the reference polynucleotide, respectively, with the oligonucleotide probe. Furthermore, the predetermined amount of the oligonucleotide probe is less than the expected amount of the amplified target polynucleotide. The ratio of the amount of the complex of the target polynucleotide with the oligonucleotide probe to the amount of the complex of the reference polynucleotide with the oligonucleotide probe is determined. Determination of the ratio is facilitated by employing second and third oligonucleotide probes. The second oligonucleotide probe has a sequence that hybridizes only with the second sequence of the target polynucleotide. The third oligonucleotide probe has a sequence that hybridizes only with a respective second sequence of the reference polynucleotide. The ratio is related to the known amount of the reference polynucleotide to determine the amount of the target polynucleotide in the sample. One or more reference polynucleotides may be employed with a corresponding third oligonucleotide probe for each reference probe. Kits for carrying out the above methods are also disclosed. The method is particularly applicable to the amplification and detection of RNA.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 5 OF 6 USPATFULL on STN
AN 2002:322456 USPATFULL
TI Quantitative determination of nucleic acid amplification products
IN Patel, Rajesh, Fremont, CA, UNITED STATES
Kurn, Nurith, Palo Alto, CA, UNITED STATES
PI US 20020182620 A1 20021205
US 6573054 B2 20030603
AI US 2002-43415 A1 20020110 (10)
RLI Continuation of Ser. No. US 1998-25639, filed on 18 Feb 1998, GRANTED, Pat. No. US 6365346
DT Utility
FS APPLICATION
LREP Dade Behring Inc., Legal Dept. - Patents, 1717 Deerfield, Rd., #778, Deerfield, IL, 60015-0778
CLMN Number of Claims: 32
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 2667
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a method for detecting the amount of a target polynucleotide in a sample. A combination is provided in a medium. The combination comprises (i) a sample suspected of containing the target polynucleotide, the target polynucleotide being in single stranded form, (ii) a reference polynucleotide comprising a sequence that is common with a sequence of the target polynucleotide, and (iii) a predetermined amount of an oligonucleotide probe that has a sequence that hybridizes with the sequence that is common. The combination is subjected to conditions for amplifying the target polynucleotide and the reference polynucleotide. The conditions permit

formation of substantially non-dissociative complexes of the target polynucleotide and the reference polynucleotide, respectively, with the oligonucleotide probe. Furthermore, the predetermined amount of the oligonucleotide probe is less than the expected amount of the amplified target polynucleotide. The ratio of the amount of the complex of the target polynucleotide with the oligonucleotide probe to the amount of the complex of the reference polynucleotide with the oligonucleotide probe is determined. Determination of the ratio is facilitated by employing second and third oligonucleotide probes. The second oligonucleotide probe has a sequence that hybridizes only with the second sequence of the target polynucleotide . The third oligonucleotide probe has a sequence that hybridizes only with a respective second sequence of the reference polynucleotide. The ratio is related to the known amount of the reference polynucleotide to determine the amount of the target polynucleotide in the sample. One or more reference polynucleotides may be employed with a corresponding third oligonucleotide probe for each reference probe. Kits for carrying out the above methods are also disclosed. The method is particularly applicable to the amplification and detection of RNA.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 6 OF 6 USPATFULL on STN
AN 2002:69768 USPATFULL
TI Quantitative determination of nucleic acid amplification products
IN Patel, Rajesh, Fremont, CA, United States
Kurn, Nurith, San Jose, CA, United States
PA Dade Behring Inc., Deerfield, IL, United States (U.S. corporation)
PI US 6365346 B1 20020402
AI US 1998-25639 19980218 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Fredman, Jeffrey; Assistant Examiner: Chakrabarti, Aroun Kr.
LREP Gattari, Patrick G, McDonnell Boehnen Hulbert & Berghoff
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 2 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 2537
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a method for detecting the amount of a target polynucleotide in a sample. A combination is provided in a medium. The combination comprises (i) a sample suspected of containing the target polynucleotide, the target polynucleotide being in single stranded form, (ii) a reference polynucleotide comprising a sequence that is common with a sequence of the target polynucleotide, and (iii) a predetermined amount of an oligonucleotide probe that has a sequence that hybridizes with the sequence that is common. The combination is subjected to conditions for amplifying the target polynucleotide and the reference polynucleotide. The conditions permit formation of substantially non-dissociative complexes of the target polynucleotide and the reference polynucleotide, respectively, with the oligonucleotide probe. Furthermore, the predetermined amount of the oligonucleotide probe is less than the expected amount of the amplified target polynucleotide. The ratio of the amount of the complex of the target polynucleotide with the oligonucleotide probe to the amount of the complex of the reference polynucleotide with the oligonucleotide probe is determined. Determination of the ratio is facilitated by employing second and third oligonucleotide probes. The second oligonucleotide probe has a sequence that hybridizes only with the second sequence of the target polynucleotide. The third oligonucleotide

probe has a sequence that hybridizes only with a respective second sequence of the reference polynucleotide. The ratio is related to the known amount of the reference polynucleotide to determine the amount of the target polynucleotide in the sample. One or more reference polynucleotides may be employed with a corresponding third oligonucleotide probe for each reference probe. Kits for carrying out the above methods are also disclosed. The method is particularly applicable to the amplification and detection of RNA.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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